Special Meeting of Research Group at Memorial Hospital

10:30 AM - Friday - December 13, 1940

Present were: Dr. Rhoads - Dr. Medinger - Dr. Scudder - Dr. Self - Dr. Thalhimer - Mrs. Myron

The questions brought up for consideration were those relating to the experimental set-up as proposed and approved by the Board of Medical Control at its meeting on November 27, 1940. It was decided that:

1. The first and most important question to be answered if possible is the relative toxicity of Plasma and Serum. To this end it was felt that the first 2 pools (8 liters each) one of Serum and one of Plasma should be used for clinical trial after preliminary chemical, electrophoretic and biological tests, using every case possible to eliminate any unknowns such as pyrogen contaminated equipment, or fluids, unnecessary filters, or unnecessary clinical tests.

2. That the pools should be numbered serially; those containing Plasma to be designated as P1, P2, P3, etc.; those having Serum to be likewise designated by S1, S2, S3, etc., so that it might be easy to trace at any time the source of the material in each pool and its eventual distribution.

3. That the final container for dispensing be a 500 cc. "Sterisol" ampoule. This container was chosen because it can be flamed closed at each end and thereby eliminate all corks, stoppers and gadgets as a possible source for untoward reactions. Further it was felt that the Serum should be dispensed in 500 cc lots, while the Plasma should be dispensed in 550 cc. lots so that comparable amounts of the actual protein containing solution might be dispensed from each ampoule. In addition to this attempt to use comparable quantities in similar cases the protein content from each pool is to be actually determined in terms

of grams per 100 cc. so that actual quantitative comparisons may be established.

4. In order to insure pyrogen-free equipment two suggestions were sustained.

a. That Doctor Thalhimer should get in touch with Mr. Biehn of the Abbott Laboratories to find out if said Company would make a donation of sterile rubber tubing dispensing outfits which have already been tested and found to be pyrogen-free.

b. Dr. Scudder felt that if such an arrangement could not be made whereby the apparatus shall have been tested before use a conductivity bridge for making such tests might be purchased and the routines as established by Walters of the Peter Bent Brigham Hospital in Boston carried out.

5. Samples for tests should not have been treated with Merthiolate before these tests are carried out because,

a. The electrolyte addition of the Merthiolate would greatly complicate the electrolyzed studies.

b. The amount of denaturation brought about by the combination of the mercury with the proteins is not known.

c. Certain individuals have a particular sensitivity to mercury compounds and would make more complex the problem of assaying the reactions.

d. In the biological tests the mercury compound may give false pictures in the exposed capillary field.

6. Samples necessary for the tests are as follows:

a. For Tiselius Patterns - 20cc
b. For electrolyzed studies - 20cc
c. For protein studies - 20cc
d. For perfusion experiments - 200cc (It was felt that in the first series tests of perfusion experiments should not be carried out.)

It was decided that the samples should be uniformly delivered to the various laboratories from Dr. Thalhimer's laboratory in small pyrex bottles with ground glass stoppers hermetically sealed with cellophane tissue.

7. Dr. Self stated that for this series of experiments it seems wise not to use cases in severe shock since minor reactions in the form of fever, chills, or urticaria, were not demonstrable in the presence of total circulatory collapse. This opinion was concurred with by all present.

Dr. Scudder and Dr. Self are to prepare form sheets for the recording of data relevant to the clinical trials. These form sheets are to have complementary punch cards in order that the data may be more readily tabulated at the end of the experiment.

At a later date when the plasma and serum have both been shown to be inoccuous when properly prepared, cases of profound shock should be sought either in Presbyterian Hospital or other hospitals in order to notice the effect of the two substances in the treatment of shock.

8. It was voted that none of the solutions in the first two pools would be used for drying.

9. Dr. Medinger stated that they now have on hand 17 flasks of Plasma which had been dried by the method developed at the Memorial Hospital. This material is ready for clinical trial. Dr. Self is to use this material on suitable clinical cases as soon as the apparatus for introducing the sterile water with which the dried plasma is to be reconstituted can be perfected by Mr. Folsom, and Dr. Medinger. These details are to be worked out as soon as possible. No tests are to be done on this batch of dried material. The object is simply to determine whether it may or may not be given safely and whether any changes in

the technique of drying may prove to be necessary before the material now being prepared at Dr. Thalhimer's laboratory is sent back to Dr. Rhoads' laboratory for drying.

Note: Please correct these notes and make any additions that you think would add to the smooth working of this program.

Sincerely yours,

BLOOD PLASMA DIVISION
Charles R. Drew, M.D.
Medical Superviser